

Leavenworth County

Estimated Economic Impact of Agriculture, Food, and Food Processing Sectors

5/24/2016

Using the most recent IMPLAN data available (2014) adjusted for 2016, 19 agriculture, food, and food processing sectors were analyzed to determine their overall contribution to the Leavenworth County economy.¹

These 19 sectors have a total direct output of approximately **\$114.4 million** and support **1,670 jobs** in Leavenworth County. Running the model for all 19 sectors simultaneously produces the following results:

Agriculture, Food, and Food Processing Sector Contribution to Overall Economy						
Impact Type ²	Employment	% Employment	Total Value Added ³	Total Value Added % of Gross Regional Product ⁴	Output ⁵	Output % of Gross Regional Product
Direct Effect	1,670.0	4.19%	\$54,256,029.15	1.74%	\$114,425,793.53	3.68%
Indirect Effect	162.0	0.41%	\$5,989,063.48	0.19%	\$13,551,131.88	0.44%
Induced Effect	133.2	0.33%	\$6,831,929.70	0.22%	\$15,370,752.78	0.49%
Total Effect	1,965.1	4.93%	\$67,077,022.34	2.16%	\$143,347,678.18	4.61%

As shown in the above table, agriculture, food, and food processing sectors support **1,965.1 jobs**, or **4.93%** of the entire workforce in the county. These sectors provide a total economic contribution of approximately **\$143.3 million**, roughly **4.61% of the economy**.

Another metric used to calculate the importance of sectors in an economy is their value added as a percentage of GRP. Total value added by the 19 agriculture, food, and food processing sectors is approximately **\$67 million**, or **2.16% of the GRP**. This indicates that personal income, business income, and taxes generated by these sectors account for **2.16% of the total economy**.

The following tables document the overall summary numbers of the model, top industries affected by employment and output, and a listing of all industries that were analyzed.

¹ Article on building a contribution analysis in IMPLAN that avoids double counting:

http://www.implan.com/index.php?option=com_content&view=article&id=660%3A660&catid=253%3AKB33&Itemid=70

² Direct, indirect, and induced effects sum together to estimate the total economic contribution in the state. **Direct effects** capture the contribution from agricultural and food products. **Indirect effects** capture the economic benefit from farms and agricultural businesses purchasing inputs from supporting industries within the state. **Induced effects** capture the benefits created when employees of farms, agricultural businesses, and the supporting industries spend their wages on goods and services within the state.

³ Value added = labor income + indirect business taxes + other property type income.

⁴ GRP = final demand of households + governments expenditures + capital + exports - imports - institutional sales.

⁵ Output = intermediate inputs + value added.

In the top ten agriculture, food, and food processing sectors by employment, the beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming sector is the top employer with **766.4 employees**. This table also shows the amount of jobs that are created by the agriculture industry in Leavenworth County.

Top Ten Sectors by Employment		
Sector	Total Employment	Total Output
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	766.4	\$27,317,813.82
Landscape and horticultural services	340.6	\$14,365,653.67
All other crop farming	150.4	\$3,863,909.86
Veterinary services	90.6	\$8,099,935.99
Support activities for agriculture and forestry	68.7	\$1,858,683.20
All other food manufacturing	62.4	\$21,473,453.23
Bread and bakery product, except frozen, manufacturing	53.4	\$6,669,097.63
Grain farming	46.3	\$5,637,526.23
Animal production, except cattle and poultry and eggs	42.8	\$1,674,598.69
Oilseed farming	33.2	\$12,471,700.15

The beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming sector directly contributes approximately **\$27.3 million** to the Leavenworth County economy. The table below also shows the amount of revenue that is generated in other industries by having a strong agriculture industry.

Top Ten Sectors by Output		
Sector	Total Employment	Total Output
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	766.4	\$27,317,813.82
All other food manufacturing	62.4	\$21,473,453.23
Landscape and horticultural services	340.6	\$14,365,653.67
Oilseed farming	33.2	\$12,471,700.15
Veterinary services	90.6	\$8,099,935.99
Bread and bakery product, except frozen, manufacturing	53.4	\$6,669,097.63
Grain farming	46.3	\$5,637,526.23
All other crop farming	150.4	\$3,863,909.86
Owner-occupied dwellings	0.0	\$3,547,442.54
Dairy cattle and milk production	16.3	\$3,375,524.28

Below is a summary of all agriculture data with employment levels and output level. These values can tell how many jobs are represented by each agriculture, food, and food processing sector and the output they contributed to the Leavenworth County economy.

All Agriculture, Food, and Food Processing Sectors		
Sector	Total Employment	Total Output
Oilseed farming	33.2	\$12,471,700.15
Grain farming	46.3	\$5,637,526.23
Vegetable and melon farming	2.7	\$337,357.29
Fruit farming	5.9	\$336,152.15
Tree nut farming	4.5	\$573,021.61
Greenhouse, nursery, and floriculture production	32.2	\$3,252,777.69
All other crop farming	150.4	\$3,863,909.86
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	766.4	\$27,317,813.82
Dairy cattle and milk production	16.3	\$3,375,524.28
Poultry and egg production	2.1	\$801,516.29
Animal production, except cattle and poultry and eggs	42.8	\$1,674,598.69
Commercial logging	1.9	\$90,236.44
Bread and bakery product, except frozen, manufacturing	53.4	\$6,669,097.63
Frozen cakes and other pastries manufacturing	2.0	\$281,878.67
All other food manufacturing	62.4	\$21,473,453.23
Wineries	2.1	\$436,303.99
All other industrial machinery manufacturing	14.2	\$3,367,335.85
Veterinary services	90.6	\$8,099,935.99
Landscape and horticultural services	340.6	\$14,365,653.67

All 105 counties in Kansas have an IMPLAN model and an agriculture, food, and food processing contribution summary. These values do not factor in the retail environment of food sales. Food retail is important, but in order to provide the most accurate picture of what production agricultural and processing contributes to Leavenworth County, the retail sector was omitted.